## **Listing of claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-55. (Cancelled)

56. (New) A method of inhibiting the metabolism of nicotine to cotinine comprising

administering to an individual an effective amount of at least one substance which

selectively inhibits CYP2A6, wherein said individual has a condition selected from drug

dependencies, psychosis, schizophrenia, Parkinson's disease, anxiety, depression,

alcoholism, dependent tobacco use and non-dependent tobacco use.

57. (New) The method of claim 56, wherein the individual maintains elevated plasma

concentrations of nicotine compared to an individual who has not been administered a

CYP2A6 inhibitor.

58. (New) The method of claim 56, wherein liver enzyme function is inhibited by greater

than 80% following administration of the CYP2A6 inhibitor.

59. (New) The method of claim 56, wherein the condition is dependent or non-

dependent tobacco use.

60. (New) The method of claim 59, wherein the condition is dependent tobacco use.

61. (New) The method of claim 56, comprising optionally administering to an individual a

mixture comprising two or more of said substances which selectively inhibits CYP2A6.

62. (New) The method of claim 56, wherein the substance which selectively inhibits

CYP2A6 is selected from

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antibodies specific for P4502A6, coumarin, 7-methoxycoumarin, 7-methylcoumarin, 7-ethoxycoumarin, furanocoumarin, methoxsalen, imperatorin, psoralen, α-naphthoflavone, isopimpinellin, β-naphthoflavone, bergapten, sphondin, coumatetralyl, (+)-cis-3,5-dimethyl-2-(3-pyridyl)-thiazolidim-4-one, naringenin, diethyldithiocarbamate, nitropyrene, menadione, imidazole antimycotics, hexamethylphosphoramide, 4-methylnitrosamine-3-pyridyl-1-butanol, aflatoxin B, indole, dihydrocoumarin, chomone, 3-isochromanone, 4,4'-methylene bis[2-chloroaniline], 6-aminochrysene, dicumarol, 4-chromanol, 1-naphthol, 1,3-indandione, 1-indanone, warfarin, sphondin, amgelicin, pimpinellin, a compound having the structure:

wherein R is  $-OCH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-CH_2CH_2CH_3$ ,  $-CH_2CH_2CH_3$ ,  $-CH_2CH_2CH_3$ , -OH,  $-NH_2$ ,  $-NO_2$  or  $-C_6H_5$ ;

a compound having the structure:

wherein R is  $-OCH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_3$ ,  $-OCH_4$ ,  $-OCH_4$ ,  $-OCH_5$ ;

a compound having the structure:

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wherein R is -H,  $-OCH_3$ ,  $-OCH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-CH_3$ ,  $-CH_4$ ,  $-CH_4$ ,  $-CH_5$ ,  $-CH_4$ ,  $-CH_5$ , -CH

a compound having the structure:

wherein R is  $-OCH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-OCH_2CH_2CH_3$ ,  $-CH_3$ ,  $-CH_4CH_3$ ,  $-CH_4CH_4$ ,  $-CH_4CH_5$ ;  $-CH_4CH_4$ ,  $-CH_4CH_4$ ,  $-CH_4CH_5$ ;

a compound having the structure:

or a compound having the structure:

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63. (New) The method of claim 56, wherein the substance that selectively inhibits CYP2A6 is selected from coumarin, furanocoumarin, methoxsalen, imperatorin, psoralen,  $\alpha$ -naphthoflavone, isopimpinellin,  $\beta$ -naphthoflavone, bergapten, sphondin, coumatetralyl (+)-cis-3,5-dimethyl-2-(3-pyridyl)-thiazolidim-4-one, naringenin, diethyldithiocarbamate, nitropyrene, menadione, imidazole antimycotics, pilocarpine, hexamethylphosphoramide, 4-methylnitrosamine-3-pyridyl-l-butanol, aflatoxin B, and mixtures thereof.

64. (New) The method according to claim 63, wherein the imidazle antimycotic is selected from miconazole and clotrimazole

65. (New) The method of claim 63, wherein said substance is formulated for slow release.

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